



UNITED STATES PATENT AND TRADEMARK OFFICE

CP

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,754	08/28/2001	Christopher D. Paulson	01-3491496.00141	7667
24319	7590	04/08/2005	EXAMINER	
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			DO, CHAT C	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,754

Applicant(s)

PAULSON ET AL.

Examiner

Chat C. Do

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment filed 11/17/2004.
2. Claims 1-20 are pending in this application. Claims 1, 11, and 20 are independent claims. This Office action is made final.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9 and 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhou (U.S. 6,389,438).

Re claim 1, Zhou discloses in Figure 13 a circuit comprising: a sample circuit (e.g. the A/D box as Analog to digital circuit) configured to detect state of an input signal and each representative of state of input signal during a present a plurality of intermediate signals plurality of clock cycles (the A/D circuit is used to convert an analog input signal to a digital output signal by sampling with clock); and a selection circuit (e.g. 206 and 212) configured to present a filtered signal (e.g. output of 212) in response a selected number of intermediate signals having a lost state (e.g. either match or un-match state, high or low) and a multi-bit selection signal representing a filtering value (e.g. clock 2

and clock 3 which are used to select R21 and Sel1) wherein filtered signal indicates input signal has been lost when selected number lost states is greater than filtering value.

Re claim 2, Zhou further discloses in Figure 13 first circuit (e.g. A/D circuit) comprises: a detect circuit (e.g. sampling) configured to (i) detect state of input signal and (ii) present a detected signal representing state of input signal; and plurality of shift registers configured to detected signal in each of clock sample cycles and (ii) present intermediate signals (e.g. the A/D box as Analog to digital circuit and the A/D circuit is used to convert an analog input signal to a digital output signal by sampling with clock).

Re claim 3, Zhou further discloses in Figure 13 second shift register circuit configures to synchronize detected signal to a clock signal defining clock cycles (e.g. inherent feature for sampling an analog signal at regular period).

Re claim 4, Zhou further discloses in Figure 13 a plurality of logic gates each configured to present a second intermediate signal in response to at least two logic gates each configured to present a second intermediate signal intermediate signals (e.g. output of the SEL1 212); a multiplexer (e.g. SELx) configure to multiplex second intermediate signals to present filtered signal.

Re claim 5, Zhou further discloses in Figure 13 each of logic gates (e.g. 206 and 212) is configured to receive one of intermediate signals (e.g. output from 204) and one of second intermediate signals (e.g. input into 206) and (ii) present another one of second intermediate signals (e.g. output of 212).

Re claim 6, Zhou further discloses in Figure 13 second selection circuit configured to present second filtered signal in response to a second selected number (e.g. SEL2) of intermediate signals having a second predetermined state (e.g. 218 and 220).

Re claim 7, Zhou further discloses in Figure 13 a status circuit (e.g. the lower portion of Figure 13) configured to present a status signal (e.g. Aout) responsive in response to filtered signal (e.g. output of 212) and second filtered signal (e.g. output of 220).

Re claim 8, Zhou further discloses in Figure 13 first selected number and second selected number is programmable (e.g. CLK3).

Re claim 9, Zhou further discloses in Figure 13 first selected number has a value different than second selected number (e.g. due to XOR logic function).

Re claim 11, it is a method claim of claim 1 with similar limitations. Thus, claim 11 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Re claim 12, it is a method claim of claim 2 with similar limitations. Thus, claim 12 is also rejected under the same rationale as cited in the rejection of rejected claim 2.

Re claim 13, it is a method claim of claim 3 with similar limitations. Thus, claim 13 is also rejected under the same rationale as cited in the rejection of rejected claim 3.

Re claim 14, it is a method claim of claim 4 with similar limitations. Thus, claim 14 is also rejected under the same rationale as cited in the rejection of rejected claim 4.

Re claim 15, it is a method claim of claim 5 with similar limitations. Thus, claim 15 is also rejected under the same rationale as cited in the rejection of rejected claim 5.

Re claim 16, it is a method claim of claim 6 with similar limitations. Thus, claim 16 is also rejected under the same rationale as cited in the rejection of rejected claim 6.

Re claim 17, it is a method claim of claim 7 with similar limitations. Thus, claim 17 is also rejected under the same rationale as cited in the rejection of rejected claim 7.

Re claim 18, it is a method claim of claim 8 with similar limitations. Thus, claim 18 is also rejected under the same rationale as cited in the rejection of rejected claim 8.

Re claim 19, it is a method claim of claim 9 with similar limitations. Thus, claim 19 is also rejected under the same rationale as cited in the rejection of rejected claim 9.

Re claim 20, it is a circuit claim of claim 1 with similar means limitations. Thus, claim 20 is also rejected under the same rationale as cited in the rejection of rejected claim 1.

Allowable Subject Matter

5. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

6. The amendment filed 11/17/2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Art Unit: 2193

In every independent claims 1, 11 and 20, the phrase “wherein said filtered signal indicates said input signal has been lost when said selected number lost states is greater than said filtering value” is considered as new matter because the applicant does not point out where it can be found in the original specification nor found by the examiner.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

7. Applicant's arguments with respect to claims 1-9 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2193


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do
Examiner
Art Unit 2193

March 29, 2005



**KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**